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Before the
Federal Communications Commission
Washington, D.C. 20554

ORIGINAL
RECEIVED

OCT - 3 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	WT Docket No. 97-153
Amendments to Part 90 of the)	RM-8584
Commission's Rules Concerning)	RM-8623
Private Land Mobile Radio Services)	RM-8680
)	RM-8734

To: The Commission - Mail Stop 1170

COMMENTS OF PHONIC EAR, INC.

1. Phonic Ear, Inc. ("Phonic Ear") hereby submits these comments in response to the *Notice of Proposed Rule Making* ("Notice") in the above-captioned proceeding, FCC 97-239, released August 25, 1997. Phonic Ear is the nation's leading manufacturer of wireless auditory assistance devices and was the petitioner for rule making in WT Docket No. 95-56,^{1/} which led to the adoption of regulations permitting auditory assistance devices to operate in the 216-217 MHz band. When those regulations were adopted just last year, Phonic Ear believed that the Commission was committed to preserving the 216-217 MHz band exclusively for very low power devices, thereby avoiding the intense interference to auditory assistance devices that has been experienced in the 72-76 MHz band. Since then, however, higher-powered operations under Part 90 have begun to proliferate in the 216-220 MHz band, including 216-217 MHz. Phonic Ear urges the Commission to act promptly in this proceeding to stop that from happening, so that the substantial number of people who rely on auditory assistance devices to

^{1/} See *In the Matter of Amendment of the Commission's Rules Concerning Low Power Radio and Automated Maritime Telecommunication's Systems Operations in the 216-217 MHz band*; WT Docket Number 95-56, 11 FCC Rcd 18517 (1996).

054

lead normal lives are not disappointed as yet another frequency band falls prey to interference from higher powered systems.

I. BACKGROUND AND PRELIMINARY STATEMENT

2. Auditory assistance devices are low-power radio devices which assist both hard-of-hearing children in school and hard-of-hearing adults (and children) in public gathering places such as theaters, auditoriums, and places of worship to hear and respond to sound.^{2/} Similar equipment is used to deliver aural descriptions of visual events (sometimes called "descriptive audio") to theater patrons who lack full sight. These are but two examples of important disability services using low power radio devices that help people with disabilities to lead more normal lives. Modern technology has progressively reduced the size of these devices and increased battery life, making the devices and their benefits available and practical for increasing numbers of people.

3. Phonic Ear long has been involved in proceedings before the Commission seeking spectrum in which such devices can operate reliably. As noted above, Phonic Ear was the petitioner for rule making in the proceeding that opened the 216-217 MHz band to auditory assistance devices, and it was also the petitioner in the 1970's whose efforts led to opening up the 72-76 MHz band. Thus, Phonic Ear has had a long-term interest and has generated significant activity by the Commission concerning the use and support of auditory devices.

^{2/} Because it is necessary to hear in order to speak, auditory assistance devices are also critical aids for many children to learn to speak.

II. THE NEED FOR CLEAR SPECTRUM FOR AUDITORY ASSISTANCE

4. Phonic Ear is especially concerned with the questions posed in paragraphs 23 through 25 of the Notice, where the Commission asks for information concerning sharing of the 216-217 MHz band and whether new measures should be adopted which would permit more shared use of the band for both high power telemetry and Low Power Radio Service ("LPRS") devices, including auditory assistance devices. While Section 90.259 of the Commission's current rules allows limited operation of telemetry devices throughout the 216-220 MHz band and thus permits sharing of the 216-217 MHz band by LPRS and telemetry operations, not much attention was paid to that rule section in WT Docket No. 95-56, with potentially unintended results in terms of harm to users of auditory assistance devices.

5. Operations conducted by schools and other users of auditory assistance devices are sensitive and must not be subject to interference. A child learning to speak cannot have his or her lesson interrupted by an overriding signal;^{3/} and a concert or theater patron cannot tolerate either a break-up, or even noise in the background, of music or dialog. While it is true, as the Commission notes, that many telemetry operations currently conducted in the 216-220 MHz band take place in rural areas, thereby possibly reducing the prospect of interference to auditory assistance devices, there is no rule limiting the geographic area of telemetry operations; and auditory assistance devices are used nationwide by schools, theaters, and other institutions in both urban and rural environments. Unfortunately, most users of auditory assistance devices do not have the technical sophistication to locate or manage interference from other spectrum users.

^{3/} Young children often do not even recognize that interference has occurred and do not alert their teachers to the problem.

Phonic Ear, as part of its service to users, can often help; but interference is always a vexing problem and is difficult enough to avoid even when its source can be pinpointed, let alone when it appears unexpectedly and a search must be undertaken to attempt to find its source.

6. The growth of telemetry, or any other high-powered, operations in the 216-217 MHz band could be extremely detrimental to users of auditory devices throughout the nation, impairing the improvement in the lives of hard-of-hearing and sightless persons that was heralded in WT Docket No. 95-56. The Commission must not allow this to happen.

III. RECENT DEVELOPMENTS IN THE 216-217 MHz BAND

7. The 216-217 MHz band has remained mostly quiet in the past, largely because the Commission has been reluctant to authorize operations that might cause interference to reception of television Channel 13 in the 210-216 MHz band. However, manufacturers and users are now discovering the band and are applying for and receiving equipment authorizations and licenses to operate there. Three exhibits demonstrate what is happening:

a. **Exhibit 1** is a list of transmitter and receiver certification grants, showing that at least 11 manufacturers are producing products in the band with output power of up to **25 watts**. This is only a partial list. It was developed primarily based on a word-search of FCC public notices since 1988, using the term "216-220," followed by confirmation through the online database available from the Commission's Equipment Authorization Branch.^{4/} Thus equipment operating in only part of that band (including

^{4/} The print-out in Exhibit 1 is a screen save from queries made to the Commission's database, not the word-search of public notices.

auditory assistance devices and Interactive Video and Data Service ("IVDS") equipment) was not identified.^{5/}

b. **Exhibit 2** is a listing of some licenses found in the ITS online database, showing that a substantial number of licenses has been issued, they are not limited to rural areas,^{6/} and some licenses are not for individual geographic locations. This list is also not likely to be complete.

c. **Exhibit 3** is a listing of experimental license grants, showing that experimental activity is under way to develop new products. Against, this list is based on a word-search of "216-220" and thus does not include experimental licenses issued for only part of the band, such as experimental operations involving the IVDS Service in the 218-219 MHz band.

IV. IMPACT OF TELEMETRY ON AUDITORY ASSISTANCE DEVICES

8. The ability of licensees to obtain authorizations for high-powered telemetry operations without restrictions poses a direct threat to the successful operation of auditory devices. That result is clearly contrary to the Commission's stated intent to restrict the 216-217 MHz band to very low power devices.^{7/} The band was needed by, and opened to, auditory assistance devices because the higher powered operations of other licensees in shared spectrum in the 72-76 MHz band had impaired the usefulness of that band, and it was the Commission's intent that the

^{5/} Four entries, not covering the entire 216-220 MHz band, were found through manual review of FCC public notices in the past.

^{6/} There are many kinds of functions in urban areas that require data monitoring that may involve RF links, such as fluid flow at water plants or in pipelines.

^{7/} See *Report and Order* WT Docket No. 95-56; 11 FCC Rcd at 18532-3.

216-217 MHz band provide an alternative where auditory and other medical devices could operate in peace and quiet.

9. The problem for auditory assistance devices is exacerbated by the fact that such devices are authorized under Part 15 and thus are secondary spectrum users, forbidden from complaining about interference from telemetry operations, which are licensed and thus are given priority.^{8/} Furthermore, the Commission explicitly turned down Phonic Ear's request in WT Docket No. 95-56 that a few channels be authorized for one-watt auditory assistance devices in public gathering places,^{9/} making it all the more difficult for auditory assistance devices to overcome interference. Unless the Commission stops the proliferation of devices operating under Section 90.259 now, the problems of the 72-76 MHz band will only be repeated, and the Commission's commitment only a year ago will have been for naught.^{10/}

V. SUGGESTED REMEDIAL ACTION

10. The Commission should take steps now to curtail licensed telemetry operations in the 216-217 MHz band. Considerable alternative spectrum in the HF, VHF, and UHF bands

^{8/} Even though Section 90.259 provides that telemetry operations are a secondary spectrum use, the Commission has always afforded licensed devices priority over unlicensed devices. Phonic Ear has in the past expressed its strong disagreement with that policy, at least where operations by disabled persons are concerned; and it continues to urge that a very high priority be given to protecting auditory assistance devices.

^{9/} See Note 7, *supra*.

^{10/} Manufacturers are just now developing new auditory assistance devices for the new 216-217 MHz band. It will be very discouraging if their products face interference when they come on the market, and users may lose the benefits of the higher band in terms of miniaturization and superior propagation characteristics.

remains available for telemetry, so telemetry needs can be met without the 216-217 MHz band.^{11/} While 216-217 MHz may be desirable because it is a "clean" band, that is why it was chosen for auditory assistance devices; and preservation of that characteristic is exactly why telemetry should be curtailed.

11. Phonic Ear suggests that Section 90.259 be repealed outright, or at least modified to permit operation only in the 217-220 MHz band, and no new operations of any kind with more than 100 mW power be permitted in the 216-217 MHz band.^{12/} Alternatively, and less desirable, licensed operations in the band should be strictly limited to (a) non-voice transmission, (b) highly directional antennas, (c) one watt or less power, and (d) fixed locations specified on each license. The first three steps are necessary to reduce the potential for interference to auditory assistance systems,^{13/} and the fourth is necessary to make it possible to locate the source of interference. Furthermore, telemetry operations should not be given priority over auditory assistance devices -- especially those that serve public gathering places -- when interference occurs.

^{11/} Phonic Ear takes no position as to how the Commission should deal with telemetry in the 217-220 MHz band.

^{12/} Whether or not it is appropriate to grandfather existing licensees in the band depends on the situation of each licensee, which is information not known to Phonic Ear. Any grandfathering should last only for the expected lifetime of equipment that has already been installed. Also, any existing operations should be migrated to frequencies above 218 MHz wherever possible.

^{13/} Because of equipment design considerations, auditory assistance devices are likely to remain exclusively analog for some time to come.

VI. CONCLUSION

12. The potential interference problem is serious, but it is early enough for the Commission to take action to prevent it from getting out of control. Phonic Ear also reminds the Commission of its special duty to some **28 million** deaf and hard-of-hearing impaired Americans under the Americans with Disabilities Act of 1990 ("ADA"), which requires special accommodations for the benefit of people with disabilities. The ADA statutorily requires operators of certain privately owned facilities including motion picture theaters, concert halls, stadiums, auditoriums, convention centers, lecture halls and other public gathering places, to install "auxiliary aids and services" which are defined to include effective methods to make aurally delivered materials available to individuals with hearing impairments.^{14/} Fulfillment of the statutory mandate dictates that the Commission maintain the viability of auditory assistance devices in the public interest and ensure that such devices may continue to operate without interference.

^{14/} 42 U.S.C. §§12102 (1)(A), 12181(7)(C)-(D), 12182(b)(1)(A)(iii).

13. Literally thousands of auditory assistance devices operate across the country; and new, improved products are being developed for the 216-217 MHz band. These devices do, can, and will improve the lives of hundreds of thousands of people if the Commission provides a clean RF environment. Achievement of these benefits requires that telemetry operations not be conducted in the 216-217 MHz band.

Respectfully submitted,



Peter Tannenwald



Rick D. Rhodes

Counsel for Phonic Ear, Inc.

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October 3, 1997

Comments of Phonic Ear, Inc.
WT Docket No. 97-153

EXHIBIT 1

EQUIPMENT AUTHORIZATIONS FOR 216-220 MHz BAND

Welcome to the Lab PAL Application Status program

FCCID: GQW3V2PT1 Type Acceptance

Receipt Date: 04/06/88 Application Date: 04/05/88
Granted: 05/19/88 Original Grant Date: 12/11/87
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90	216-220	.01	.005	11K2F2D

Notes:

FCCID: GZ383TTRX-1000S Notification

Receipt Date: 06/08/88 Application Date: 05/27/88
Granted: 06/22/88 Original Grant Date: 06/22/88
FCC Rule Part(s): 15
Frequency (MHz) : 216-220
Equipment Class : Communications Receiver

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	5	216-220	.001	.004	1K00A1D

Notes:

FCCID: GZ383TWT Notification

Receipt Date: 06/08/88 Application Date: 05/27/88
Granted: 07/05/88 Original Grant Date: 07/05/88
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	5	216-220	.002	.0025	NON

Notes:

FCCID: FBR5FKRSPTX-1 Type Acceptance

Receipt Date: 02/17/89 Application Date: 02/01/89
 Granted: 04/26/89 Original Grant Date: 04/26/89
 Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
MM	90.217	216-220	.07	-	20K0F2D

Notes:

MM: Type accepted in accordance with Section 90.217.

FCCID: CU87WXSTB-86 Type Acceptance

Receipt Date: 03/13/90 Application Date: 03/05/90
 Granted: 04/13/90 Original Grant Date: 04/13/90
 Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
BC	90	216-220	1	.0005	20K0F1D

Notes:

BC: The output power is continuously variable from the value listed in this entry to 5%-10% of the value listed.

FCCID: CU87WXSCR-86 Type Acceptance

Receipt Date: 07/05/90 Application Date: 05/04/90
 Granted: 08/07/90 Original Grant Date: 08/07/90
 Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90	216-220	25	.0005	20K0F1D

FCCID: D4H6M7-NL200H Type Acceptance

Receipt Date: 10/28/92 Application Date: 10/26/92
 Granted: 12/15/92 Original Grant Date: 12/15/92
 Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90.259	216-220	12	.0005	36K0F1D

FCCID: KQ9812 Type Acceptance

Receipt Date: 11/19/93 Application Date: 11/12/93
 Granted: 01/12/94 Original Grant Date: 01/12/94
 Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90.259	216-220	15	.0005	1M00F1D

FCCID: KQ9816

Type Acceptance

Receipt Date: 11/19/93 Application Date: 11/12/93
Granted: 01/12/94 Original Grant Date: 01/12/94
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90.259	216-220	15	.0005	1MOOF1D

FCCID: KQ9901

Type Acceptance

Receipt Date: 11/19/93 Application Date: 11/12/93
Granted: 01/12/94 Original Grant Date: 01/12/94
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90.259	216-220	15	.0005	30KOF1D

FCCID: FYGPT375-42

Notification

Receipt Date: 03/02/94 Application Date: 02/22/94
Granted: 03/25/94 Original Grant Date: 03/25/94
FCC Rule Part(s): 15
Frequency (MHz) : 216-220
Equipment Class : Communications Receiver

Notes:

The manufacture and/or importation of this device must cease on June 23, 1999.

FCCID: F8BTEZF175

Notification

Receipt Date: 02/16/94 Application Date: 01/31/94
Granted: 03/16/94 Original Grant Date: 03/16/94
FCC Rule Part(s): 15
Frequency (MHz) : 216-220
Equipment Class : Communications Receiver

Notes:

This device has shown compliance with new rules adopted under Docket 87-389 and is not affected by Section 15.37, transition rule.

FCCID: MCV1422000001-RPT Type Acceptance

Receipt Date: 10/10/96 Application Date: 10/07/96
Granted: 12/16/96 Original Grant Date: 12/16/96
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90.259	216.02-219.98	10	.0005	REPEATER

Remarks:

Bi-directional for 11K2F1D signals

FCCID: EFOT200 Type Acceptance

Receipt Date: 02/18/97 Application Date: 02/21/97
Granted: 05/29/97 Original Grant Date: 05/29/97
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	90	216-218	2	.0005	8K40F3D

FCCID: NBIMTAG216 Type Acceptance

Receipt Date: 01/15/97 Application Date: 01/13/97
Granted: 05/06/97 Original Grant Date: 05/06/97
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	95(G)	216.4875	.0114	.005	270HAXN

FCCID: NBIVTAG216 Type Acceptance

Receipt Date: 01/15/97 Application Date: 01/13/97
Granted: 05/06/97 Original Grant Date: 05/06/97
Equipment Class : Non-Broadcast Transmitter

Note(s)	Rule Part(s)	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission
-	95(G)	216.4875	.01728	.005	270HAXN

GQW
Total Alert Corporation
39 Robertson Road, Suite 261
Nepean Ontario K2M 8R2 Canada

GZ3
Wildlife Materials Inc
Route 1 Box 427A
Carbondale, IL 62901

FBR
Fleetwood Group Inc
PO Box 1259
Holland, MI 49422-1259

CU8
Fairfield Industries Inc
10627 Kinghurst
Houston, TX 77099

D4H
GLB Electronics Inc
151 North America Drive
Buffalo, NY 14224

KQ9
Sercel Inc
7700 E. 38th. Street
Tulsa, OK 74145

FYG
Tait Electronics USA Inc
9434 Old Katy Road, Suite 110
Houston, TX 77055

F8B
Telemetry Technologies Inc
11111 Wilcrest Green, Suite 201
Houston, TX 77042

EFO
Tactical Electronics Corporation
5589 Cajeput Court
Melbourne Village, FL 32901

NBI
Electronic Tracking Systems Inc
6340 LBJ Freeway
Dallas, TX 75240

MCV
Input/Output Inc
12300 Parc Crest Drive
Stafford, TX 77477

Comments of Phonic Ear, Inc.
WT Docket No. 97-153

EXHIBIT 2

LICENSES ISSUED IN THE 216-217 MHz BAND

AA/ECC2

Fleetwood furniture is manufacture, product named "Reply"

Greg Beaudette(sales manager)

wireless response system handheld with special buttons, different channels, licenses

done by end user operate at 216 and 245mc with 8channels at each freq. cost at \$285 ea.

for keypad, receiver and computer software \$4300

***** REFERENCE COPY THIS IS NOT A LICENSE *****

: FLEETWOOD FURNITURE COMPANY RS: GRANTED SERVICE:
IB LICENSE ISSUE-DATE: 950405
: WNRU901 FILE-NR: 9409134973 license EXPIRE-DATE:
000405
ADVISORY NO: PORTABLE: 1 AIRCRAFT: MARINE:
PAGERS:

----- STATION TECHNICAL SPECIFICATIONS -----

| | | | | OUTPUT | | |
| | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT.
HGT.
.D. | FREQUENCIES | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA |
TO TIP

: 216.01250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
216.51250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
217.01250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
217.51250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
218.01250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
219.01250 MO 1 20K0F2D .07 99999
LATITUDE: LONGITUDE: RADIUS-OF-OP:
POINTS: 11832 JAMES ST HOLLAND MIPOINT PHONE: 6163961142
CONDITIONS: #39 950405M-- FLEETWOOD FURNITURE COMPANY
NICHOLAS W MEDENDORP PO BOX 1259 11832 JAMES ST HOLLAND MI 49424

***** REFERENCE COPY THIS IS NOT A LICENSE *****

: FLEETWOOD FURNITURE CO RS: PENDING SERVICE:
IB LICENSE ISSUE-DATE: 900404
LICENSE EXPIRE-DATE: 950404
: WNRU901 FILE-NR: R37790
ADVISORY NO: OF MOBILES BY CATEGORY: VEHICULAR:RTABLE: 1

----- STATION TECHNICAL SPECIFICATIONS -----

				OUTPUT		
	OF	EMISSIONS	POWER	E.R.P.	GROUND	ANT.

HGT.

.D.	FREQUENCIES	CLA	UNITS	DESIGNATOR	(WATTS)	(WATTS)	ELEVA
-----	-------------	-----	-------	------------	---------	---------	-------

TO TIP

: 216.01250 MO 1 20K0F2D .07

LATITUDE: LONGITUDE: RADIUS-OF-OP:

TX STREET ADDRESS CITY COUNTY ST AREA OF OPERATION

01: MI 0.1 MIRA 42-51-16N 086-05-42W OTTAWA

POINTS: 11832 JAMES ST HOLLAND MIPOINT PHONE: 6163961142CONDITIONS:

#38 #39

: 950305U-----

FLEETWOOD FURNITURE CO*NICHOLAS W MEDENDORP*832 JAMES ST*HOLLAND*MI

494221259

.....
 FCC PART 90 DATA BASE REPORT * RADIO STATION LICENSEE * TODAYS DATE: 28-Oct-98
 LICENSEE: KERR LAKE REGIONAL WATER SYSTEM RS: GRANTED
 DBA RADIO SERVICE: IW LICENSE ISSUE-DATE: 980502
 CALLSIGN: KNNU338 FILE-NR: 9802D021571 LICENSE EXPIRE-DATE: 010502
 NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
 AIRCRAFT: MARINE: PAGERS:
 FCC | |STN |NO OF|EMISSIONS |POWER |E.R.P. |GROUND|ANT. HGT.
 I.D. | FREQ. |CLA |UNITS|DESIGNATOR |(WATTS)| (WATTS) |ELEVA | TO TIP

01: 216.82500 FX1 1 18K0F1D 3.00 13.4 489 20

LATITUDE: N361932 LONGITUDE: W0782944 RADIUS-OF-OP:

02: 216.82500 FX1 1 18K0F1D 3.00 12.0 381 128

LATITUDE: N361323 LONGITUDE: W0782622 RADIUS-OF-OP:

03: 216.82500 FX1 1 16K0F1D 3.00 12.0 449 20

LATITUDE: N361744 LONGITUDE: W0783707 RADIUS-OF-OP:

04: 216.82500 FX1 1 16K0F1D 3.00 12.0 381 39

LATITUDE: N361604 LONGITUDE: W0784007 RADIUS-OF-OP:

05: 216.82500 FX1 1 18K0F1D 3.00 13.0 308 20

LATITUDE: N362615 LONGITUDE: W0782135 RADIUS-OF-OP:

06: 216.82500 FX1 1 16K0F1D 3.00 13.0 420 20

LATITUDE: N362336 LONGITUDE: W0782012 RADIUS-OF-OP:

TX	STREET ADDRESS	CITY	COUNTY	ST
01	200 FT N FROM EDGE OF US 1	HENDERSON	VANCE	NC
02	300 BLK OF CHURCH ST 200	FKITTRELL	VANCE	NC
03	ON OLD HWY 75 SR1004 .5	MIOXFORD	GRANVILLE	NC
04	GO .2 MI NW ON HARPER	RENNOXFORD	GRANVILLE	NC
05	LEFT OFF FLEMINGTOWN RD	ONHENDERSON	VANCE	NC
06	VAULT IS LOCATED ON US 158	HENDERSON	VANCE	NC

CONTROL POINTS: WATER TREATMENT PLANT FLEMING RD HENDERSON NC

CONTROL POINT PHONE: 9194382141 SPECIAL CONDITIONS: #39

SMRS: 960809D

KERR LAKE REGIONAL WATER SYSTEM
 WATER TREATMENT PLT MICHAEL A HICKS
 FLEMING RD
 HENDERSON NC 27536

This system is used for municipal fresh and waste water remote monitoring. The system updates every 15 or 30 seconds by FM radio links built by a Florida manufacturer at a 2400 baud data rate. DATA FLOW SYSTEMS INC is the system designer and provider who arranged for the FCC to allow 168 channels in the 216-218 MHz band at 12.5 KHz spacing, with typical output power of 3-5 watts. Other systems operate at 150-175 Mc, 450-470 Mc, and 900 Mc with equipment built by TEKK and MAXON.

FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96

LICENSEE: DATA FLOW SYSTEMS INC RS: GRANTED
DBA NAME: RADIO SERVICE: IB LICENSE ISSUE-DATE: 950803
CALLSIGN: WPHW931 FILE-NR: 9503150416 LICENSE EXPIRE-DATE: 000803
NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
AIRCRAFT: MARINE: PAGERS:
FCC | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT.HGT
I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.82500 FX1 1 16K0F1D 2.00 11.0 20 49

LATITUDE: N280746 LONGITUDE: W0803746 RADIUS-OF-OP:

02: 216.82500 FX1 1 16K0F1D 2.00 9.0 26 20

LATITUDE: N280514 LONGITUDE: W0803943 RADIUS-OF-OP:

03: 216.82500 FX1 1 16K0F1D 2.00 9.0 7 20

LATITUDE: N280716 LONGITUDE: W0803528 RADIUS-OF-OP:

04: 216.82500 FX1 1 16K0F1D 2.00 9.0 30 20

LATITUDE: N280044 LONGITUDE: W0803941 RADIUS-OF-OP:

TX STREET ADDRESS CITY COUNTY ST

01 : 659 EAU GALLIE BLVD MELBOURNE BREVARD FL

02 : 550 ACACIA AVE MELBOURNE BREVARD FL

03 : 834 BROOKSIDE DR INDIALANTIC BREVARD FL

04 : 598 VIOLET AVE PALM BAY BREVARD FL

CONTROL POINTS: 659 EAU GALLIE BLVD MELBOURNE FL

CONTROL POINT PHONE: 4072595009 SPECIAL CONDITIONS: #39

SMRS: 950804N

DATA FLOW SYSTEMS INC

659 EAU GALLIE BLVD

MELBOURNE FL 32935

FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96

LICENSEE: DATA FLOW SYSTEMS INC RS: PENDING
DBA NAME: RADIO SERVICE: IB LICENSE ISSUE-DATE: 950803
CALLSIGN: WPHW931 FILE-NR: 150416 LICENSE EXPIRE-DATE: 000803
NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
AIRCRAFT: MARINE: PAGERS:
FCC | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT.HGT
I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.82500 FX1 1 16K0F1D 2.00 11.0 20 49

LATITUDE: N280746 LONGITUDE: W0803746 RADIUS-OF-OP:

02: 216.82500 FX1 1 16K0F1D 2.00 9.0 26 20

LATITUDE: N280514 LONGITUDE: W0803943 RADIUS-OF-OP:

03: 216.82500 FX1 1 16K0F1D 2.00 9.0 7 20

LATITUDE: N280716 LONGITUDE: W0803528 RADIUS-OF-OP:

04: 216.82500 FX1 1 16K0F1D 2.00 9.0 30 20

LATITUDE: N280044 LONGITUDE: W0803941 RADIUS-OF-OP:

.....
 FCC PART 90 DATA BASE REPORT *RADIO STATION LICENSEE* TODAY'S DATE: 28-Oct-98
 LICENSEE: GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY RS: GRANTED
 DBA NAME: RADIO SERVICE: IW LICENSE ISSUE-DATE: 980502
 CALLSIGN: KNNU337 FILE-NR: 9602D021570 LICENSE EXPIRE-DATE: 010502
 NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
 AIRCRAFT: MARINE: PAGERS:
 FCC | | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
 I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.82500 FX1 1 16K0F1D 2.00 7.0 49 66
 LATITUDE: N394951 LONGITUDE: W0750438 RADIUS-OF-OP:
 02: 216.82500 FXO 1 16K0F1D 2.00 13.0 10 20
 LATITUDE: N395005 LONGITUDE: W0750429 RADIUS-OF-OP:
 03: 216.82500 FXO 1 16K0F1D 2.00 13.0 89 20
 LATITUDE: N394811 LONGITUDE: W0750125 RADIUS-OF-OP:
 04: 216.82500 FXO 1 16K0F1D 2.00 13.0 33 20
 LATITUDE: N394746 LONGITUDE: W0750427 RADIUS-OF-OP:
 05: 216.82500 FXO 1 16K0F1D 2.00 13.0 144 20
 LATITUDE: N394409 LONGITUDE: W0750109 RADIUS-OF-OP:
 06: 216.82500 FXO 1 16K0F1D 2.00 13.0 151 20
 LATITUDE: N394512 LONGITUDE: W0745919 RADIUS-OF-OP:

TX STREET ADDRESS	CITY	COUNTY	ST
01 : 501 LANDINR RD CHEWS LANDIGLOUCESTER CITY	CAMDEN		NJ
02 : 508 N FRONT ST	GLOUCESTER CITY	CAMDEN	NJ
03 : LITTLE MILL RD 200 FT E OF GLOUCESTER CITY	CAMDEN		NJ
04 : 809 W LAKE AVE	GLOUCESTER CITY	CAMDEN	NJ
05 : 43-5 JONQUIL WAY	GLOUCESTER CITY	CAMDEN	NJ
06 : 23 EASTON DR	GLOUCESTER CITY	CAMDEN	NJ

CONTROL POINTS: ADMIN BLDG 501 LANDING RD CHEWS LANDING GLENDORA SECTION OF GLOUCESTER TOWNSHIP NJ

CONTROL POINT PHONE: 6092278666 SPECIAL CONDITIONS:

SMRS: 960502N GLOUCESTER TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

ROBERT BENSON
 PO BOX 216
 GLENDORA NJ 08029

.....
FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-98
LICENSEE: KERR LAKE REGIONAL WATER SYSTEM RS: GRANTED
DBA NAMERADIO SERVICE: IW LICENSE ISSUE-DATE: 960502
CALLSIGN: KNNU336 FILE-NR: 9602D021569 LICENSE EXPIRE-DATE: 010502
FREQUENCY ADVISORY NO:
NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:

AIRCRAFT: MARINE: PAGERS:
FCC | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.82500 FX1 1 16K0F1D 3.00 5.3 331 167
LATITUDE: N382602 LONGITUDE: W0782113 RADIUS-OF-OP:
02: 216.82500 FX1 1 16K0F1D 3.00 5.5 499 141
LATITUDE: N381940 LONGITUDE: W0783555 RADIUS-OF-OP:
03: 216.82500 FX1 1 16K0F1D 3.00 11.0 430 167
LATITUDE: N381831 LONGITUDE: W0783516 RADIUS-OF-OP:
04: 216.82500 FX1 1 16K0F1D 3.00 11.0 489 154
LATITUDE: N381643 LONGITUDE: W0782341 RADIUS-OF-OP:
05: 216.82500 FX1 1 16K0F1D 3.00 112.0 489 131
LATITUDE: N361910 LONGITUDE: W0782431 RADIUS-OF-OP:
06: 216.82500 FX1 1 16K0F1D 3.00 12.0 371 128
LATITUDE: N362513 LONGITUDE: W0781620 RADIUS-OF-OP:

TX STREET ADDRESS	CITY	COUNTY	ST
01 : 2.8 N ON US 158 BY PASS FR	HENDERSON	VANCE	NC
02 : 200 FT.S OF INT OF GROVE & OXFORD		GRANVILLE	NC
03 : 150 FT E OF THE COR OF HUNOXFORD		GRANVILLE	NC
04 : 450 FT N OF INT OF BEAR PO	HENDERSON	VANCE	NC
05 : 250 S OF INT OF CHAVASSE A	HENDERSON	VANCE	NC
06 : 800 FT S OF US 158 ON DIRT	WARRENTON	WARREN	NC

CONTROL POINTS: WATER TREATMENT PLANT FLEMING RD HENDERSON NC
CONTROL POINT PHONE: 9194382141 SPECIAL CONDITIONS:
SMRS: 960502N

KERR LAKE REGIONAL WATER SYSTEM
WATER TREATMENT PLT MICHAEL A HICKS
FLEMING RD
HENDERSON NC 27636

.....
 FCC PART 90 DATA BASE REPORT* RADIO STATION LICENSEE* TODAY'S DATE: 28-Oct-96
 LICENSEE: CALIFORNIA ENERGY COMPANY INC RS: PENDING
 DBA NARADIO SERVICE: IW LICENSE ISSUE-DATE: 000000
 CALLSIGN: WNPR921 FILE-NR: 361745 LICENSE EXPIRE-DATE: 000000
 FREQUENCY ADVISORY NO:
 NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
 AIRCRAFT: MARINE: PAGERS:
 FCC | | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
 I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.62500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 216.75000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 216.85000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 M00217.15000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.25000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.42500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.67500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.85000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.97500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.15000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.22500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.22500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 219.05000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 219.12500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 - 219.65000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16

TX STREET ADDRESS CITY COUNTY ST

01: INYO CA

CONTROL POINTS: OFC 35 MI OF RIDGECREST HWY 395 COSO JUNCTION CA

CONTROL POINT PHONE: 6197642551 SPECIAL CONDITIONS:

SMRS: 950310X

* CALIFORNIA ENERGY COMPANY INC
 AL CESARZ
 PO BOX 185
 RIDGECREST CA 93556

.....
 FCC PART 90 DATA BASE REPORT* RADIO STATION LICENSEE* TODAY'S DATE: 28-Oct-96
 LICENSEE: CALIFORNIA ENERGY COMPANY INC RS: GRANTED
 DBA NAME RADIO SERVICE: IW LICENSE ISSUE-DATE: 950315
 CALLSIGN: WNPR921 FILE-NR: 9501361745 LICENSE EXPIRE-DATE: 000315
 NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
 AIRCRAFT: MARINE: PAGERS:
 FCC | | STN | NO OF EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
 I.D. | FREQ. | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.62500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 216.75000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 216.85000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.15000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.25000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.42500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.67500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.85000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 217.97500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.15000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.22500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 218.37500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 219.05000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 219.12500 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16
 219.65000 FXOT 1 10K0F2D 10.00 99999
 LATITUDE: N360230 LONGITUDE: W1174900 RADIUS-OF-OP: 16

TX STREET ADDRESS CITY COUNTY ST
 01: INYO CA

CONTROL POINTS: OFC 35 MI OF RIDGECREST HWY 395 COSO JUNCTION CA

CONTROL POINT PHONE: 8197642551 SPECIAL CONDITIONS: #35 #39

SMRS: 950315X

CALIFORNIA ENERGY COMPANY INC
 AL CESARZ
 PO BOX 185
 RIDGECREST CA 93556

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FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96
LICENSEE: WASHINGTON PUBLIC POWER SUPPLY SYSTEM RS: PENDING
DBA NAME: RADIO SERVICE: IW LICENSE ISSUE-DATE: 951122
CALLSIGN: WPIT809 FILE-NR: 366298 LICENSE EXPIRE-DATE: 001122
NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:
AIRCRAFT: MARINE: PAGERS:
FCC | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 216.01250 MO 1 20K0F2D .07 .0
LATITUDE: N462012 LONGITUDE: W1191613 RADIUS-OF-OP: 12
TX STREET ADDRESS CITY COUNTY ST
01: BENTON WA
CONTROL POINTS: 3000 GEORGE WASHINGTON WAY RICHLAND WA
CONTROL POINT PHONE: 5093725202SPECIAL CONDITIONS: #39
SMRS: 951129N

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
JOHN CARPENTER
PO BOX 968
RICHLAND WA 993520968

.....
FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96
LICENSEE: WEIGH TRONIX RS: GRANTED
DBA NAMRADIO SERVICE: IB LICENSE ISSUE-DATE: 920505
CALLSIGN: KNCG311 FILE-NR: 9107034149 LICENSE EXPIRE-DATE: 970505
NUMBER OF MOBILES BY CATEGORY: VEHICULAR: 9 PORTABLE:
AIRCRAFT: MARINE: PAGERS:
FCC | STN | NO OF | EMISSIONS | POWER | E.R.P. | GROUND | ANT. HGT.
I.D. | FREQ. | CLA | UNITS | DESIGNATOR | (WATTS) | (WATTS) | ELEVA | TO TIP

01: 461.17500 FB 1 20K0F3E 25.00 60.0 1200 30
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP:
02: 216.20000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
216.80000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
217.40000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
218.00000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
218.80000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
219.20000 MO 1 54K0F9W .10
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
461.17500 MO 3 20K0F3E 25.00
LATITUDE: N433939 LONGITUDE: W0942958 RADIUS-OF-OP: 10
TX STREET ADDRESS CITY COUNTY ST
01: 1000 ARMSTRONG DR FAIRMONT MARTIN MN
02: MARTIN MN
CONTROL POINTS: 1000 ARMSTRONG DR FAIRMONT MN
CONTROL POINT PHONE: 5072388224SPECIAL CONDITIONS: #39
SMRS: 920505M

WEIGH TRONIX
1000 ARMSTRONG DR POB 928
FAIRMONT MN 560310000

.....
FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96

LICENSEE: BOEING COMPANY

RS: GRANTED

DBA NAME: RADIO SERVICE: IB

LICENSE ISSUE-DATE: 960306

CALLSIGN: KNNN391 FILE-NR: 9512D011457

LICENSE EXPIRE-DATE: 010306

NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:

AIRCRAFT: MARINE: PAGERS:

FCC | |STN|NO OF|EMISSIONS |POWER | E.R.P. |GROUND|ANT. HGT.

I.D.| FREQ. |CLA|UNITS|DESIGNATOR |(WATTS)| (WATTS) |ELEVA | TO TIP

01: 216.01250 MO 10 20K0F2D .07 .0 99999

LATITUDE: N373730 LONGITUDE: W0971636 RADIUS-OF-OP: 56

216.51250 MO 10 20K0F2D .07 .0 99999

LATITUDE: N373730 LONGITUDE: W0971636 RADIUS-OF-OP: 56

217.01250 MO 10 20K0F2D .07 .0 99999

LATITUDE: N373730 LONGITUDE: W0971636 RADIUS-OF-OP: 56

219.01250 MO 10 20K0F2D .07 .0 99999

LATITUDE: N373730 LONGITUDE: W0971636 RADIUS-OF-OP: 56

TX STREET ADDRESS CITY COUNTY ST

01: SEDGWICK KS

AREA OF OPERATION

CONTROL POINTS: FREQUENCY MGMT MS K06 93 WICHITA KS

CONTROL POINT PHONE: 3165231004SPECIAL CONDITIONS: #39

SMRS: 960307N

BOEING COMPANY

FREQUENCY MGMT MS 3U AJ

PO BOX 3707

SEATTLE WA 981242207

.....
FCC PART 90 DATA BASE REPORT*RADIO STATION LICENSEE*TODAYS DATE: 28-Oct-96

LICENSEE: WASHINGTON PUBLIC POWER SUPPLY SYSTEM

RS: GRANTED

DBA NAME: RADIO SERVICE: IW

LICENSE ISSUE-DATE: 951122

CALLSIGN: WPIT809 FILE-NR: 9509366296

LICENSE EXPIRE-DATE: 001122

NUMBER OF MOBILES BY CATEGORY: VEHICULAR: PORTABLE:

AIRCRAFT: MARINE: PAGERS:

FCC | |STN|NO OF|EMISSIONS |POWER | E.R.P. |GROUND|ANT. HGT.

I.D.| FREQ. |CLA|UNITS|DESIGNATOR |(WATTS)| (WATTS) |ELEVA | TO TIP

01: 216.01250 MO 1 20K0F2D .07 .0 99999

LATITUDE: N462012 LONGITUDE: W1191613 RADIUS-OF-OP: 12

TX STREET ADDRESS CITY COUNTY ST

01: BENTON WA

CONTROL POINTS: 3000 GEORGE WASHINGTON WAY RICHLAND WA

CONTROL POINT PHONE: 5093725202SPECIAL CONDITIONS: #39

SMRS: 951122N

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

JOHN CARPENTER

PO BOX 968

RICHLAND WA 993520968